

## **REMARKS**

### **A Request for One (1) Month Extension of Time pursuant to 37 C.F.R.**

#### **1.136(a) and (b) is attached hereto.**

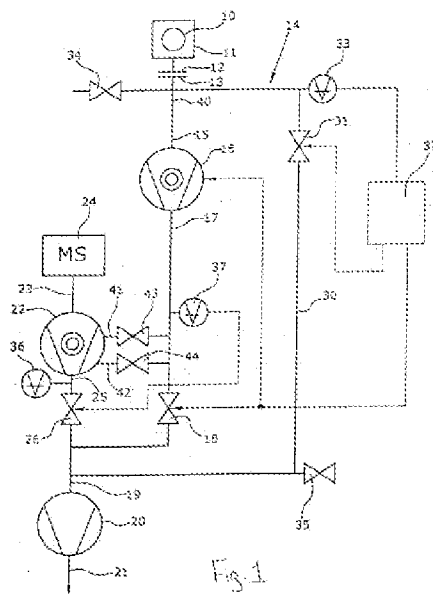
Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,520,176 to Becker ("Becker '176") in view of U.S. Patent No. 4,505,647 to Alloca et al. ("Alloca '647"). Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker '176 and Alloca '647 as applied to Claim 5 and further in view of U.S. Patent No. 5,585,548 to Grosse Bley et al. ("Grosse Bley '548"). Claims 5 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker '176 and Alloca '647 in further view of U.S. Patent No. 4,225,288 to Mugele et al. ("Mugele '288") Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The above-captioned patent application has been carefully reviewed in light of the non-final Office Action to which this Amendment is responsive. Claim 5 has been amended in an effort to more clearly describe the present invention and not for reasons related solely to patentability. To that end, it is believed that no new matter has been entered. Claims 5-8 are pending in this application. In view of the claim amendments, Applicant believes the pending application is in condition for allowance.

Turning to the specific objections and rejections, the Examiner has indicated that the specification contains various informalities that require correction. Per the Examiner's instruction, the specification has been amended accordingly.

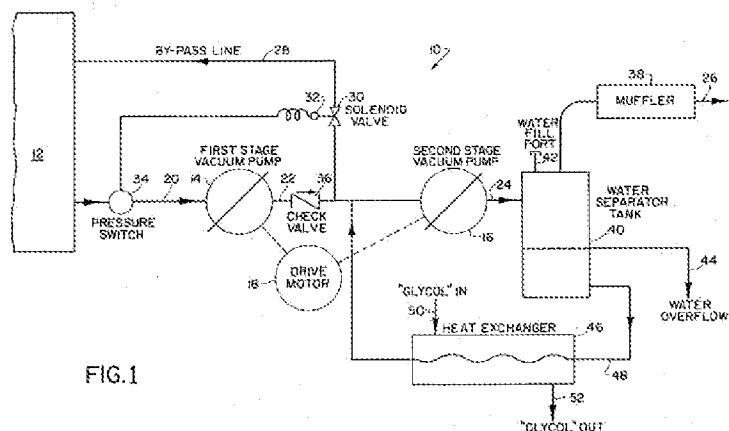
In response to the Examiner's rejection of Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Becker '176 in view of Alloca '647, Applicants have amended Claim 5 to include the limitation that the second valve provided between the exit side of the first vacuum pump and the primary pump is controlled in response to the pressure at the inlet of the leak detector. With reference to Figure 1, support for this amendment is found in the specification stating, ***"[a] control 32 controls the first valve 31 and the second valve 18 connected with the exit side 17 of the high vacuum pump 16 in dependence on the pressure at the inlet 13 which is measured by a pressure gauge 33."***

(Specification at page 4, paragraph [0017])



Valve 18, therefore, is a switch valve between the first high vacuum pump 16 and the primary pump 20 that is controlled, meaning turned either on or off, at any given time depending on the pressure at the inlet of the leak detector.

The Examiner states that Alloca '647 discloses a second valve 36 provided between the exit side of the first vacuum pump 14 and a primary pump 16, as shown in Alloca '647 Figure 1:



However, valve 36 of Alloca '647 is a check valve to prevent back pressure on the first stage pump. As stated in the specification, "[i]nterstage line 22 was provided

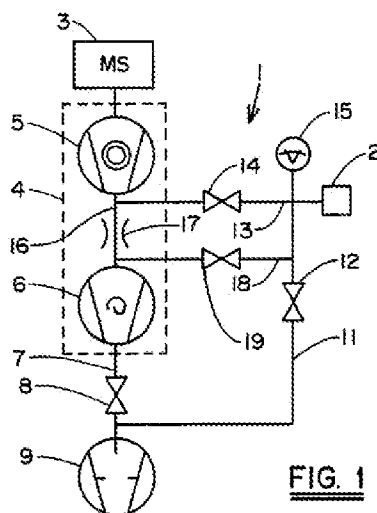
with **a check valve 36 to prevent back pressure on the first stage pump** and a muffler 38 was fitted for noise reduction on the second stage output line 24.” (Alloca ‘647 at col. 3, lines 19-23) Therefore, check valve 36 is not controlled and has no switching function for connecting or disconnecting the first stage vacuum pump 14 with the second stage vacuum pump 16.

Accordingly, because Alloca ‘647 fails to disclose a second valve provided between the exit side of the first high vacuum pump and the primary pump that is controlled in response to the pressure at the inlet of the leak detector, the combination of Becker ‘176 and Alloca ‘547 fails to disclose all of the limitations of amended Claim 5, and the Applicants respectfully submit that the invention claimed in amended Claim 5 is not rendered obvious by the prior art. As such, Applicants believe Claim 5 is in allowable condition.

The Examiner has further rejected Claim 5 under 35 U.S.C. §103(a) as being unpatentable over Becker ‘176 and Alloca ‘647 in further view of Mugele ‘288. In doing so, the Examiner admits that Mugele ‘288 does not disclose “a second valve between the first high vacuum pump and the primary pump,” (January 31, 2008 Office Action, page 9, paragraph 21) and relies on Alloca ‘647 for disclosure of this element. In light of the arguments herein concerning Alloca ‘647, the combination of Becker ‘176, Alloca ‘647 and Mugele ‘288 fails to disclose a second valve provided between the exit side of the first high vacuum pump and the primary pump that is controlled in response to the pressure at the inlet of the leak detector. Therefore, the combination of Becker ‘176, Alloca ‘547 and Mugele ‘288 fails to disclose all of the limitations of amended Claim 5, and the Applicants respectfully submit that the invention claimed in amended Claim 5 is not rendered obvious by the prior art. As such, Applicants believe Claim 5 is in allowable condition.

Furthermore, since “[d]ependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious,” *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988), Applicant respectfully submits that dependent claims 6-8, all of which depend from independent Claim 5, are also in allowable condition.

The Examiner has also rejected dependent Claim 8 under 35 U.S.C. §103(a) as being unpatentable over Becker '176 and Alloca '647 as applied to Claim 5 and further in view of Grosse Bley '548. In doing so, the Examiner relies on Grosse Bley '548 as disclosing a second high vacuum pump further comprising at least one intermediate inlet connected to the exit side of the first high vacuum pump via a valve, the valve being dependently controlled based upon the pressure of the exit side of the first high vacuum pump. Applicants respectfully submit that Grosse Bley '548 fails to disclose this limitation as the valves disclosed in Grosse Bley '548, elements 14 and 19 in Figure 1 shown below, are connected directly to intermediate inlets 13 and 18, rather than being positioned between the first and second vacuum pumps as in the present invention.



As such, valves 14 and 19 cannot be dependently controlled based upon the pressure of the exit side of the first high vacuum pump, as required by Claim 8. Therefore, because Becker '176 and Alloca '647 fail to disclose all of the limitations required by independent Claim 5, as discussed herein, and because Grosse Bley '548 fails to disclose all of the limitations of dependent Claim 8, Claim 8 is not rendered obvious by the prior art. Accordingly, Applicants believe Claim 8 is in allowable condition.

In view of the above amendment and arguments, Applicants believe the pending application is in condition for allowance.

Applicants believe a fee is due with this response. Please charge our Deposit Account No. 50-0289, under Order No. 327\_106 from which the undersigned is authorized to draw.

Dated: May 27, 2008

Respectfully submitted,

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